Punttoo/PunttooPlus GPS Tracking Device

User Operation Manual

Ver. 1.10

WARNING

THIS PRODUCT CONTAINS LITHIUM BATTERY. ELECTRONIC HAZARDOUS IF DAMAGED, SHOCKED, OVERHEATED, DISPOSED OF IN FIRE OR WATER, OR IMPROPERLY CHARGED, OPERATED, HANDLED, STORED, OR TRANSPOSRTED. WARRANTY VOID IF OPENED, OR MODIFIED. WARRANY DOES NOT APPLY IF DAMAGED, SHOCKED, OVERHEATED, DISPOSED OF IN FIRE OR WATER, OR IMPROPERLY CHARGED, OPERATED, HANDLED, STORED, OR TRANSPOSRTED. ALWAYS USE DESIGNATED CHARGER LEAVE CHARGING ATTENDED. ALWAYS KEEP OUT OF REACH OF CHILCHREN.

KEY, PORT, AND INDICATORS

Power switch with indicator

LED indicator status

RED slowly blinking – Waiting to get online.

RED fast blinking – Searching for GPS and in transmission. (seeking status)

RED/**BLUE** fast blinking alternatively – Working in good order. (captured status)

LIGHT OFF – Powered off, or in sleep/hibernation status.

TO TURN LIGHT ON/OFF REMOTELY

Sign in to account and go to DEVICE top menu, click on Edit for the desired device, then from the left click on LED On/Off. This option can only be functioning when device is actually powered up and with firmware version 3.1 or higher. (See Page 18)

Battery charging jack with protective cover

(Plugging charger into this jack will begin battery charging, as well as physically disconnect battery and thus force to power off device. Do this only when you are unable to power off the device in a normal way with the power key)

CAUTION

1. Always cover this port during deployment for safety and protection. Electronic hazardous if water/dust/metal/chemical comes inside.
2. Only use designated charger. Use with other charger may not charge battery correctly

WARNING

MAGENET MAY BE WAY VERY POWERFUL. SAFETY HANDLING STRONGLY ADVISED!

Magnet for mounting on metal surface

CAUTION: this magnet is made from Rare Earth Element and may show extreme strength during operation. Personal and property safety is strongly advised.

Tips

Clean and flat metal surface provides much more pull-force than rusted, dust covered, or uneven shaped.

Magnet for mounting on metal surface

CAUTION: this magnet is made from Rare Earth Element with high pull force, and may demonstrate extreme strength during operation. Personal and property safety is strongly advised.

Important Steps before Deployment

1. GETTING CELLULAR NETWORK REGISTERED FIRST
   - Power on the device by single press on the power button.
   - Make sure the red power indicator slow blinking (half second on, half second off).
   - The slowly blinking red will turn to fast blinking (¼ second on, ¼ second off), meaning cellular is registered and in normal transmission status. This usually takes 3-10 seconds.

   If it stays in solid red and does not change to blinking status, it may indicate failure of network registration and signals cannot be transmitted. It could be caused by:

   - The wireless carrier does not have coverage in this area. User can try from a different location a few miles away.
   - Device is in problem status. Contact Technical Support for further diagnostic.

2. GETTING GPS READY (*VERY IMPORTANT IF TO DEPOLOY COVERTLY*)
   - After network is registered, DO NOT deploy this device to a hidden place yet.
   - Instead, bring this device in hand and outdoor for a 2-10 minutes (varies depending on environmental and weather conditions) until a blue/green background light surrounded power button area becomes flashing.
   - At this time, local satellite is acquired and locked. Now this device can be deployed in a covert position.

3. GOOD PLACEMENT AND BAD PLACEMENT (*VERY IMPORTANT IF TO DEPOLOY COVERTLY*)
   - The front of this device is where internal antenna is mounted.
   - It is important NOT to get this side facing against metal object, battery, very thick materials, for wireless signals can be significantly reduce or completely blocked, resulting in excessive seeking status or not detectable at all.
   - ALWAYS have this front side have a way pass out to the sky, directly or indirectly, without metal objects in between.
   - ALWAYS avoid placing this device in a metal enclosure, where radio signals are shielded.

4. PUTTING THE CHARGING PORT COVER ON IF OUTDOOR USE.
   - Water leaking inside can damage this electronic device and is risky of electronic hazardous.
   - Never drop into water or overheat.

What's the reasonable time battery can last?

- Your device built with motion sensor and power is automatically controlled by motion sensor - that means device automatically powers up when motion is detected, and goes to sleep when motion no longer lasts. When device is standing still and not in motion, it automatically goes to sleep mode for power conservation.
- Your device is motion-activated, so its battery operation hour is usually measured by hours of in-motion. Number of operation days could vary and depends on many factors: motion hours, reporting interval, signal quality, temperature, environment conditions, etc.

Battery Type	Approx. hours of operation
Punttoo	Approx. 48-62 hours of in-motion time
Punttoo Plus	Approx. 55-96 hours of in-motion time

Actual operation hours may vary due to interval setting, signal strength, temperature, and environment conditions. Generally: 1) The faster the interval is, the shorter time the battery can last. 2) The better the signal condition is, the longer time the battery can last. 3) The shorter time device in motion, the longer time battery can last. 4) Battery hours may become significantly shorter when environment temperature over normal range.

- Forced Shutdown - device forces to shut down when battery level drops to or below 1% to prevent over drain damaging battery.
- Temperature Range – battery performs the best in range of 40 F° - 80 F°. Battery capacity may dramatically drop down when below 40 F°, or may stop functioning when over 80 F°.
- Battery Chemical Aging - battery capacity may begin to decrease when the chemical's agess over 2-3 years, or over hundreds times of charging cycle.
- This battery has no memory effects.

Tips to Maintain Better Battery Capacity

- Always use the designated charger.
- Avoid over drain (over discharge).
- Begin to charge at no less than 40% may help to maintain best battery capacity and make this battery to last longer.

WARRNING

THIS PRODUCT CONTAINS LITHIUM BATTERY. ELECTRONIC HAZARDOUS IF DAMAGED, SHOCKED, OVERHEATED, DISPOSED OF IN FIRE OR WATER, OR IMPROPERLY CHARGED, OPERATED, HANDLED, STORED, OR TRANSPOSRTED. WARRANTY VOID IF OPENED, OR MODIFIED. WARRANY DOES NOT APPLY IF DAMAGED, SHOCKED, OVERHEATED, DISPOSED OF IN FIRE OR WATER, OR IMPROPERLY CHARGED, OPERATED, HANDLED, STORED, OR TRANSPOSRTED. ALWAYS USE DESIGNATED CHARGER LEAVE CHARGING ATTENDED. ALWAYS KEEP OUT OF REACH OF CHILCHREN.

PRODUCT WARRANTY

1. This product carries One-Year limited manufacturer Warranty, except battery.
2. Warranty voids if opened or modified by user, operated under extreme conditions, or charged using non-designated chargers.
3. Warranty does not apply to operation area not covered by wireless carrier. Merchandise with operation worn or physical damage, defectives by improper operation are not eligible for warranty.
4. Warranty does not apply to improper operation, improper deployment, and wireless carrier uncovered area.

AIRTIME AND MAPPING SERVICE

1. Online 7/24: https://airitmeplus.net
2. Call or text to: (+1) 408.493.0310 [Monday-Friday 10AM-5PM US Pacific Time]

TECHNICAL SUPPORT

Email Support: support@soniyatech.com

Call or text to: (+1) 408.493.0310 [Monday-Friday 10AM-4PM US Pacific Time]

Mailing Address:

Soniya Technology International Inc.

2098 Walsh Avenue, STE C-1, Santa Clara, CA 95054, U.S.A.

Specification

Physical	Application Interface
L x W x H: 115 x 85 x 46 (mm) or 4.5 x 3.4 x 1.8 (inch) Housing: Flame Retardant ABS Weight: approx. 1.0 lbs (Punttoo), approx. 1.2 lbs (Punttoo Plus). Magnetic Mount Pull Force: approx. 53.5 lbs.	Host protocols: AT commands, TCP/UDP API Internal protocols: TCP/UDP API API control/status: AT commands, TCP/UDP API, commands over SMS

Over-the-Air
Command Firmware update

Radio	SIM Card / Interface / I/O
WCDMA Dual-Band UMTS/HSDPA 850/1900MHz GSM Quad-Band GSM/GPRS/EDGE 850/900/1800/1900MHz	SIM: Internal 1.8/3 V SIM auto select Interface: Mini USB jack for manufacture diagnose Audio: None

GPRS Packet Data	Environment
Mode: Class B, Multislot 8 Protocol: GPRS Release 97, SMG 31 Coding Schemes: CS1 – CS4 Packet Channel: PBCCH/PCCCH	Operating Temperature: -20 °C to +55 °C (-4 °F to 131°F) Storage Temperature: -20 °C to +60 °C (-4 °F to 140 °F) Humidity: Up to 85% non-condensing

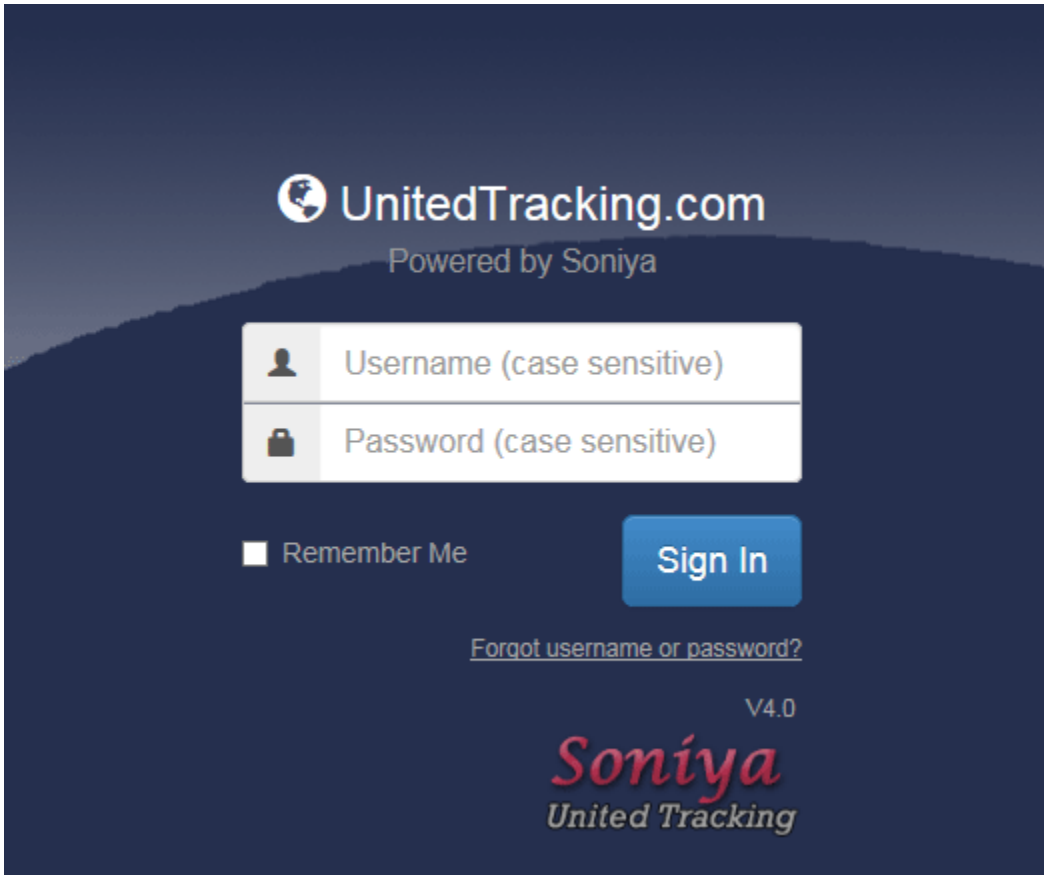
Wireless Functionality	GPS/GNSS Functionality
Voice: None HSDPA: max 3.6Mbps (DL) WCDMA: max 384Kbps (DL), max 384Kbps (UL) EDGE: max 236.8Kbps (DL), max 118Kbps (UL) GPRS: max 85.6Kbps (DL), max42.8Kbps (UL)	Channel: 22 tracking/66 acquisition Frequency: GPS L1, C/A Code Sensitivity: Tracking -165 dBm, Reacquisition -160 dBm, Cold -147 dBm Accuracy: 2.5m CEP GPS Protocols: NMEA, Binary

Data Logging	Power
Punttoo: unavailable Punttoo Plus: approx. 1000 waypoints	Rechargeable Lithium Ion Battery

Disclaimer

Soniya strongly recommends that all installations, hookups, transmissions, etc., be performed by persons who are experienced in the fields of radio frequency technologies. Soniya acknowledges that the installation, setup and transmission guidelines contained within this publication are guidelines, and that each installation may have variables outside of the guidelines contained herein. Said variables must be taken into consideration when installing or using the product, and Soniya shall not be responsible for installations or transmissions that fall outside of the parameters set forth in this publication. Soniya shall not be liable for consequential or incidental damages, injury to any person or property, anticipated or lost profits, loss of time, or other losses incurred by Customer or any third party in connection with the installation of the Products or Customer's failure to comply with the information and instructions contained herein.

SONIYA UNITED TRACKING SERVICE OPERATION GUIDE



Ver. 4.0

Technical Support: support@soniyatech.com

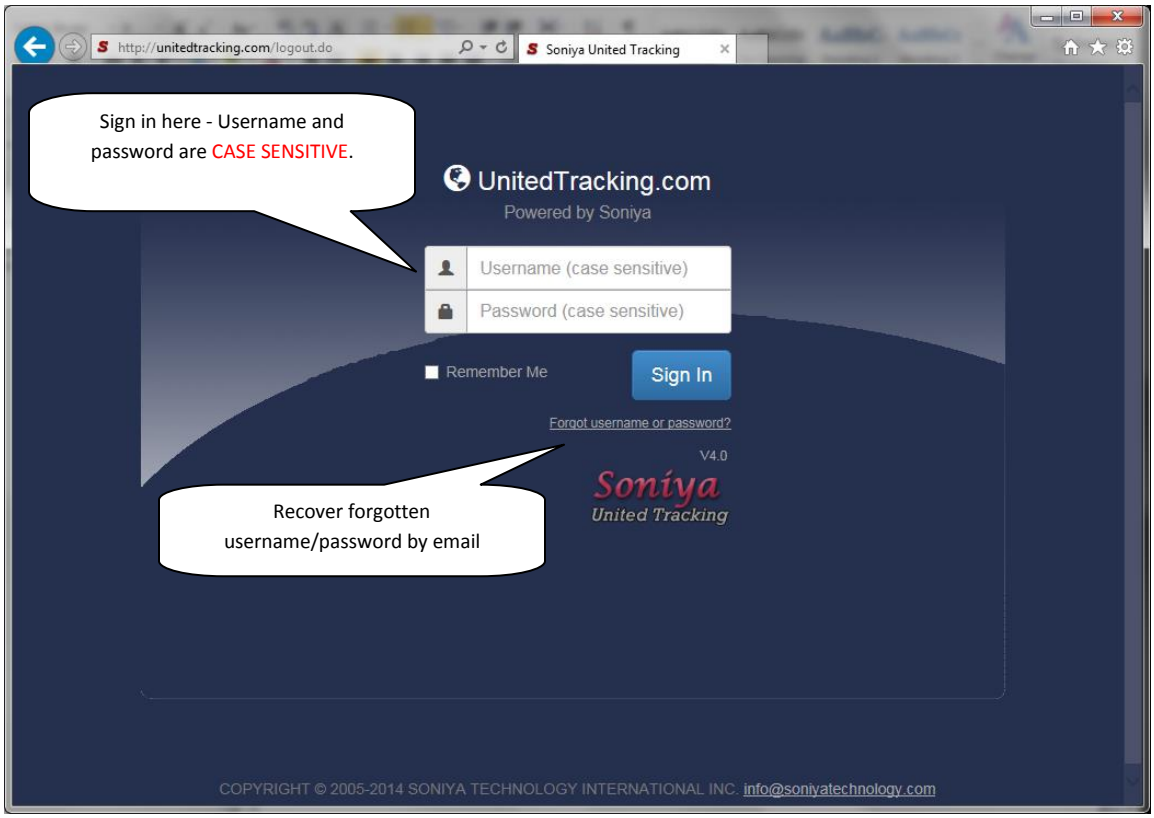
USER LOGIN

1. Browser Compatibility - computer based:
   - ***[Recommended]*** Mozilla Firefox or Google Chrome
   - ***[Supported]*** Microsoft IE 6.0 or above, Apple Safari (PC and iOS).
   - ***[Not Recommended]*** Aol, Opera, and other non-mainstream broswers.

   Note: When viewed by incompatible browsers, map and some function may not display properly.

2. Browser Compatibility – phone, PDA or handheld:
   - ***[Recommended]*** Apple iPhone.
   - ***[Generally Supported]*** Android based smart phones, depends on versions.
   - ***[Not Recommended]*** Blackberry, Windows Phone.

3. Visiting service website: www.unitedtracking.com and sign in with assigned username/password

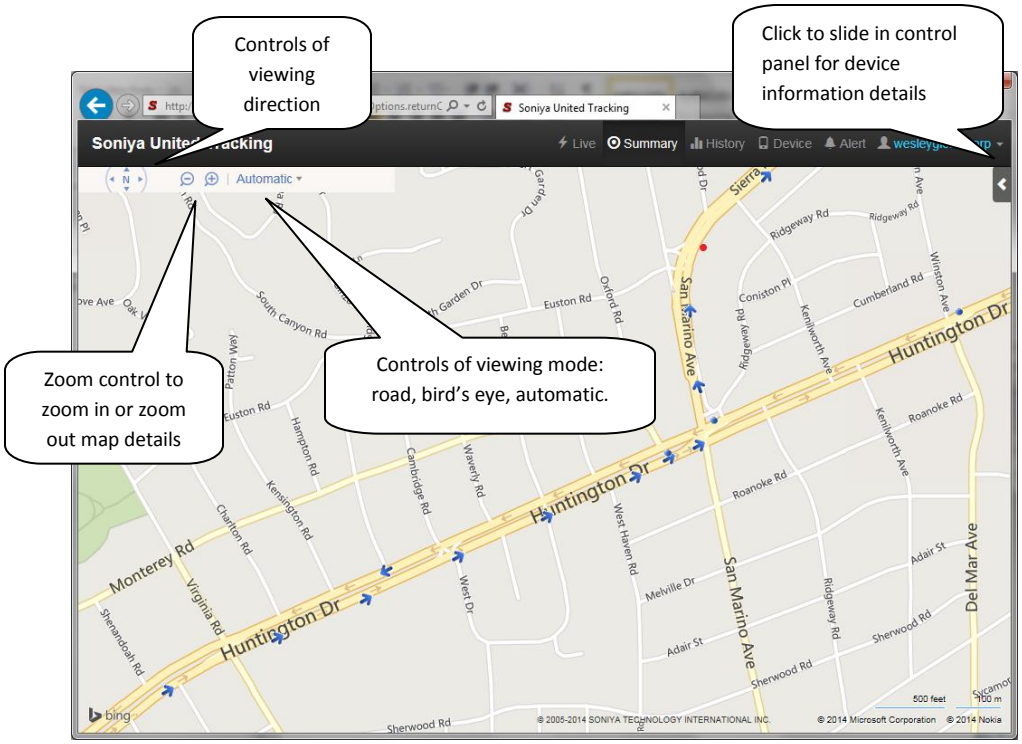


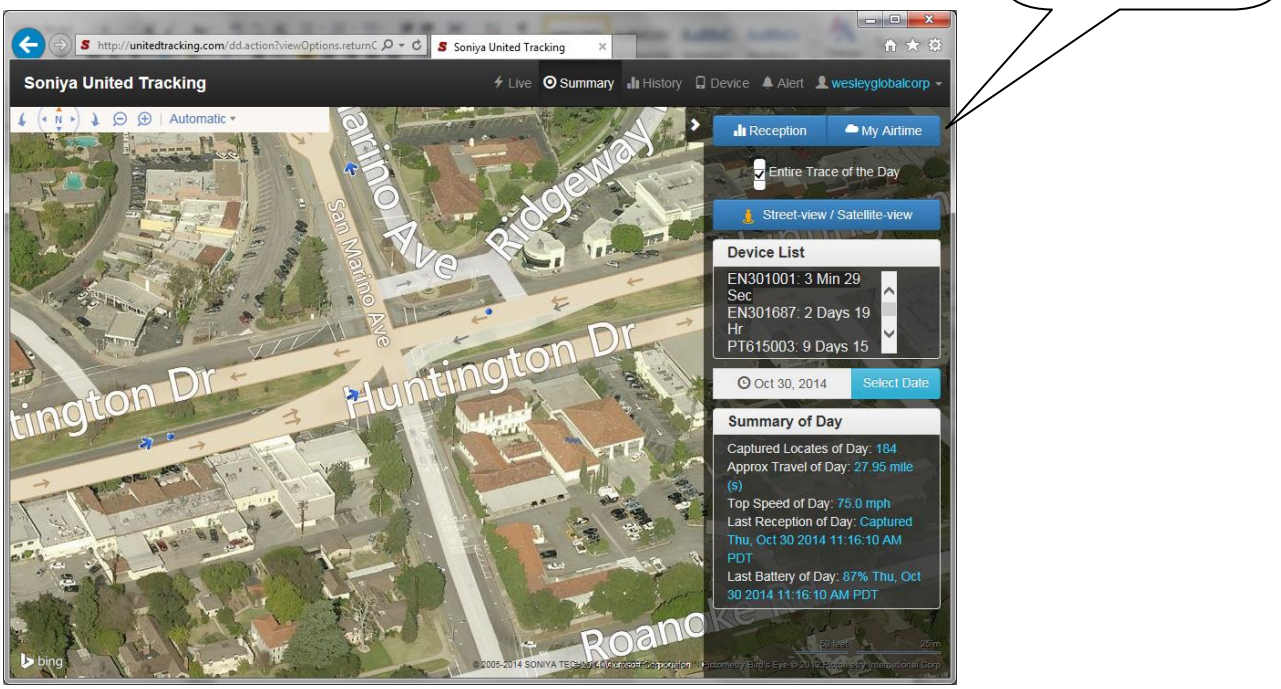
SUMMUARY PAGE

This page provides a summary of a day recorded. Date can be selected from by calendar.

Soniya United Tracking
Live
Summary
History
Device
Alert
demo
Reception
My Airtime
Entire Trace of the Day
Street-view / Satellite-view
Device List
PT615002: 18 Min 39 Sec
Oct 30, 2014
Select Date
Summary of Day
Captured Locates of Day: 17
Approx Travel of Day: 0 mile(s)
Top Speed of Day: 0.0 mph
Last Reception of Day: Captured Thu, Oct 30 2014 10:16:05 AM PDT
Last Battery of Day: 88% sleep Thu, Oct 30 2014 10:16:05 AM PDT
Click "Hide Panel" slide off panel and make bigger map screen
Select a device to switch the display of related information (below)
Click this sign to open calendar. Dates with history record available is highlighted in bold
Information for device selected from Device List (above)
Check on this box to load full trace of the day for selected device, or only the last five are shown
A red symbol represents the most recent location
A blooming red represents a recent Geo-Fence occurrence.
A dot represents a stopped location (speed zero)
An arrow represents moving and its moving direction
EN301001: 3 Min 29 Sec
EN301687: 2 Days 19 Hr
PT615003: 9 Days 15
Captured Locates of Day: 184
Approx Travel of Day: 27.95 mile (s)
Top Speed of Day: 75.0 mph
Last Reception of Day: Captured Thu, Oct 30 2014 11:16:10 AM PDT
Last Battery of Day: 87% Thu, Oct 30 2014 11:16:10 AM PDT
Select a device to switch the display of related information (below)
Click to open calendar. Dates with record available is highlighted in bold

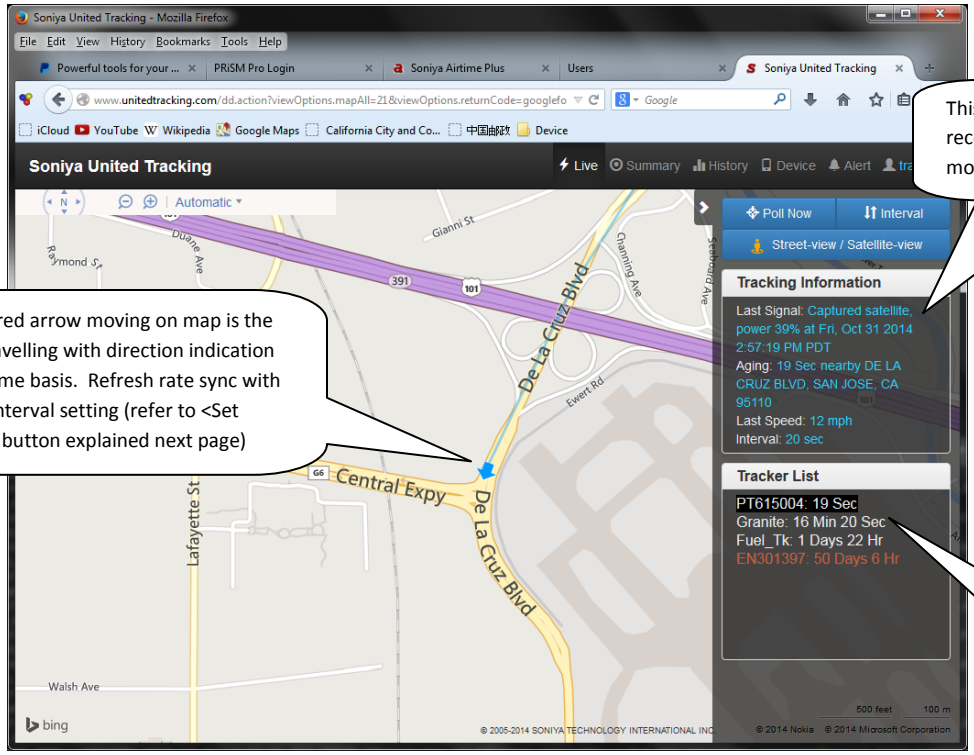
The following two screens when control panel is slide off and on:





LIVE PAGE

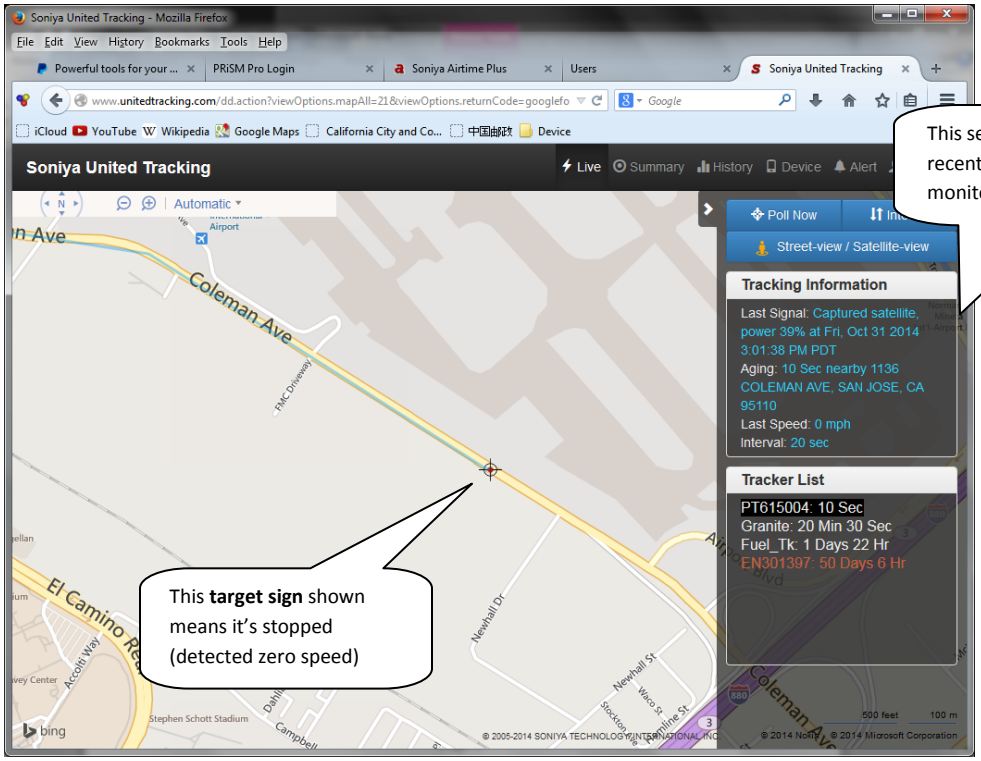
A colored arrow indicates target moving with direction at the moment. Screen refreshes automatically based on device interval setting. Different devices are shown in different colors.



This section displays details of most recent reading received from monitored device

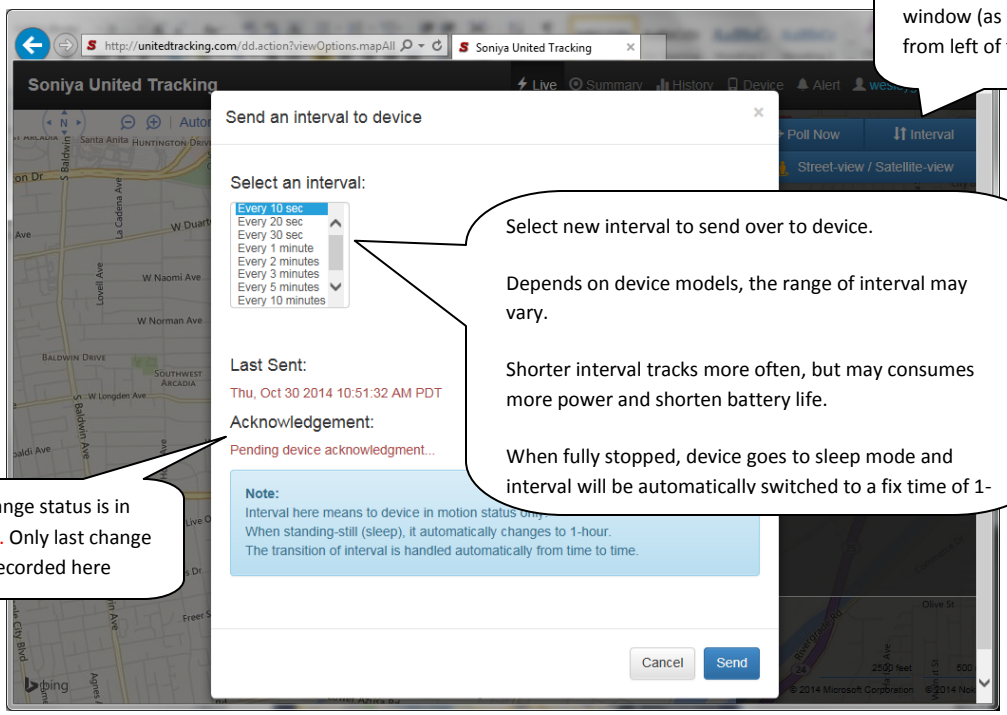
This colored arrow moving on map is the target travelling with direction indication on real time basis. Refresh rate sync with current interval setting (refer to <Set Interval> button explained next page)

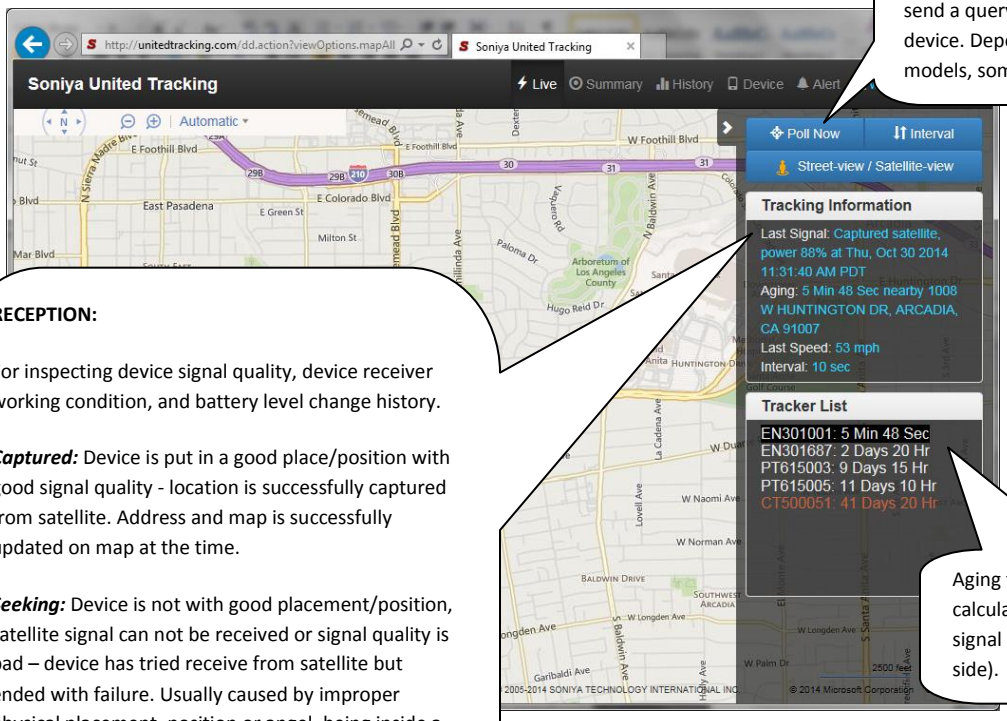
For multiple devices in a same account, Click to select a device to monitor



This section displays details of most recent reading received from monitored device

This **target sign** shown means it's stopped (detected zero speed)

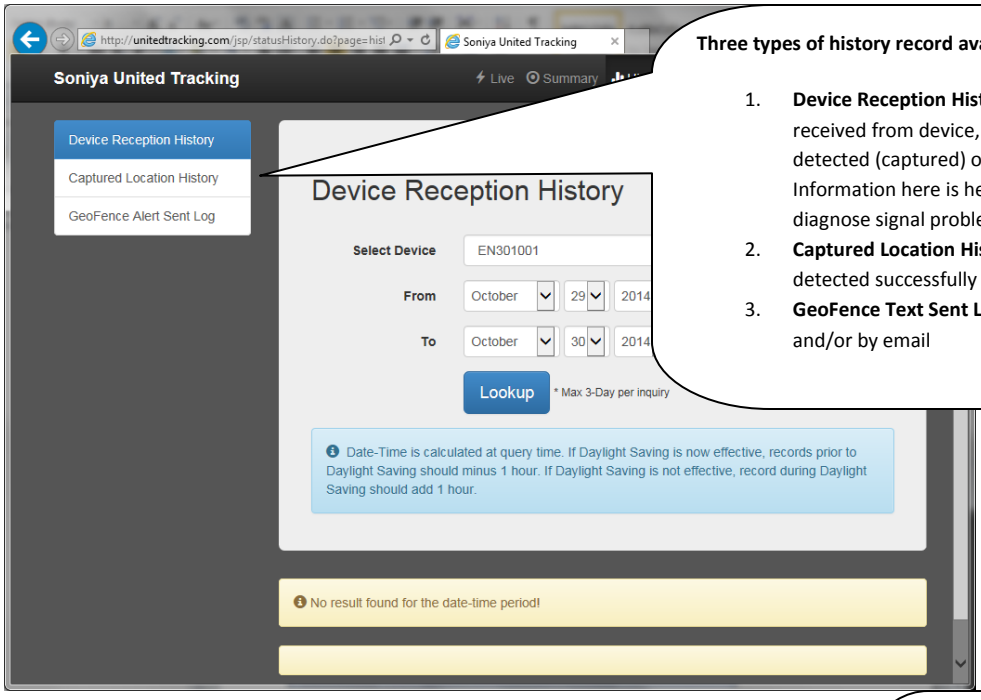

Click on this button to open set interval window (as shown from left of this screen)
Send an interval to device
Select an interval:
Every 10 sec
Every 20 sec
Every 30 sec
Every 1 minute
Every 2 minutes
Every 3 minutes
Every 5 minutes
Every 10 minutes
Last Sent:
Thu, Oct 30 2014 10:51:32 AM PDT
Acknowledgement:
Pending device acknowledgment...
Note:
When standing-still (sleep), it automatically changes to 1-hour.
The transition of interval is handled automatically from time to time.
Cancel
Send
Poll Now
Interval
Street-view / Satellite-view
Select new interval to send over to device.
Depends on device models, the range of interval may vary.
Shorter interval tracks more often, but may consumes more power and shorten battery life.
When fully stopped, device goes to sleep mode and interval will be automatically switched to a fix time of 1-
Change status is in red. Only last change is recorded here


Poll Now function is to send a query to the device. Depends on models, some device do
Soniya United Tracking
Live
Summary
History
Device
Alert
Poll Now
Interval
Street-view / Satellite-view
Tracking Information
Last Signal: Captured satellite, power 88% at Thu, Oct 30 2014 11:31:40 AM PDT
Aging: 5 Min 48 Sec nearby 1008 W HUNTINGTON DR, ARCADIA, CA 91007
Last Speed: 53 mph
Interval: 10 sec
Tracker List
EN301001: 5 Min 48 Sec
EN301687: 2 Days 20 Hr
PT615003: 9 Days 15 Hr
PT615005: 11 Days 10 Hr
CT500051: 41 Days 20 Hr
RECEPTION:
For inspecting device signal quality, device receiver working condition, and battery level change history.
Captured: Device is put in a good place/position with good signal quality - location is successfully captured from satellite. Address and map is successfully updated on map at the time.
Seeking: Device is not with good placement/position, satellite signal can not be received or signal quality is bad – device has tried receive from satellite but ended with failure. Usually caused by improper physical placement, position or angel, being inside a building, facing against metal, battery body, magnet, or other objects that blocks radio signal, or inside metal enclosure. The way location or address can not work out.
Aging time shown here is calculated since last Captured signal (refer to explain from right side).

HISTORY PAGE

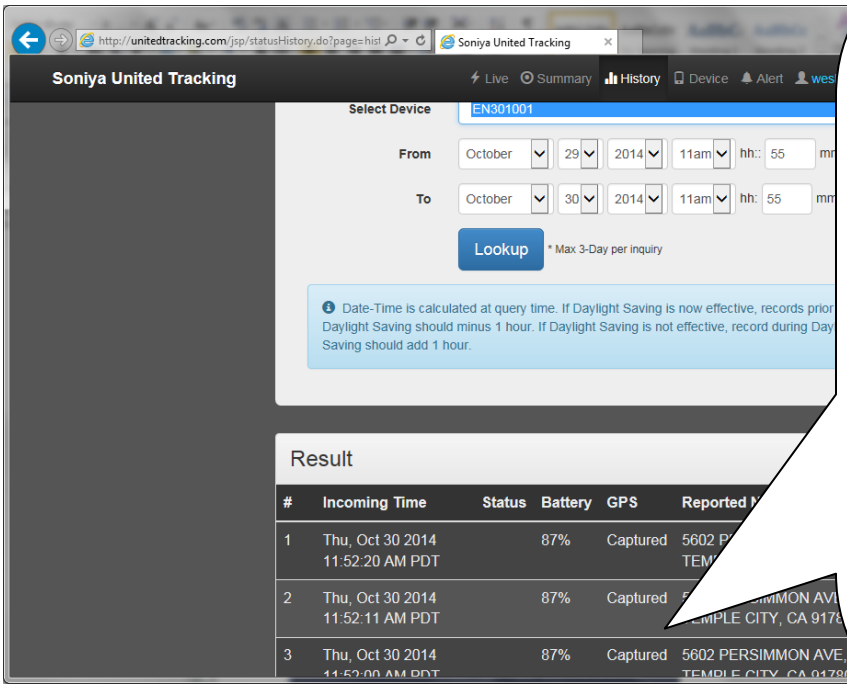
This page contains comprehensive history information to manage your report or diagnose problem.

DEVICE RECEPTION HISTORY



Three types of history record available in this page:

1. **Device Reception History**: Record of all incoming signals received from device, whether locations is successfully detected (captured) or failed to detect (seeking). Information here is helps to analyze device work status and diagnose signal problems.
2. **Captured Location History**: Record of those locations detected successfully (captured)
3. **GeoFence Text Sent Log**: History of text messages sent and/or by email



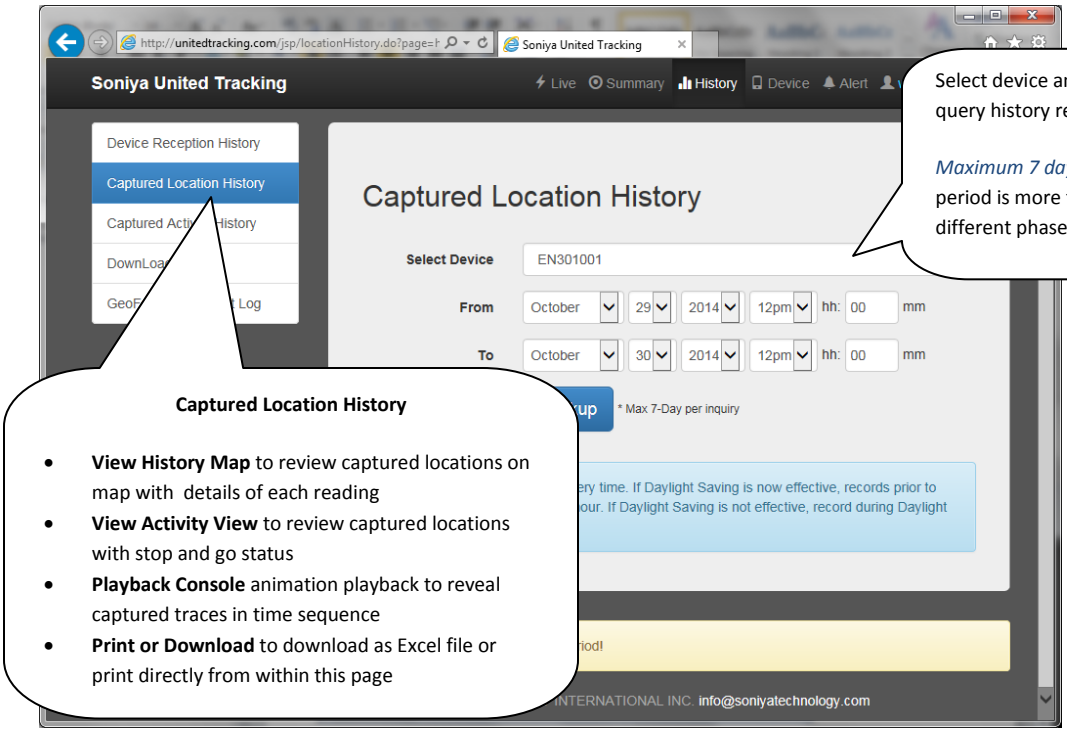
Device Reception History

For inspecting device signal quality, device receiver working condition, and battery level change history.

Captured: Device is put in a good place/position with good signal quality - location is successfully captured from satellite. Address and map is successfully updated on map at the time.

Seeking: Device is not with good placement/position, satellite signal can not be received or signal quality is bad – device has tried receive from satellite but ended with failure. Usually caused by improper physical placement, position or angel, being inside a building, facing against metal, battery body, magnet, or other objects that blocks radio signal, or inside metal enclosure. The way location or address can not work out.

CAPTURED LOCATION HISTORY

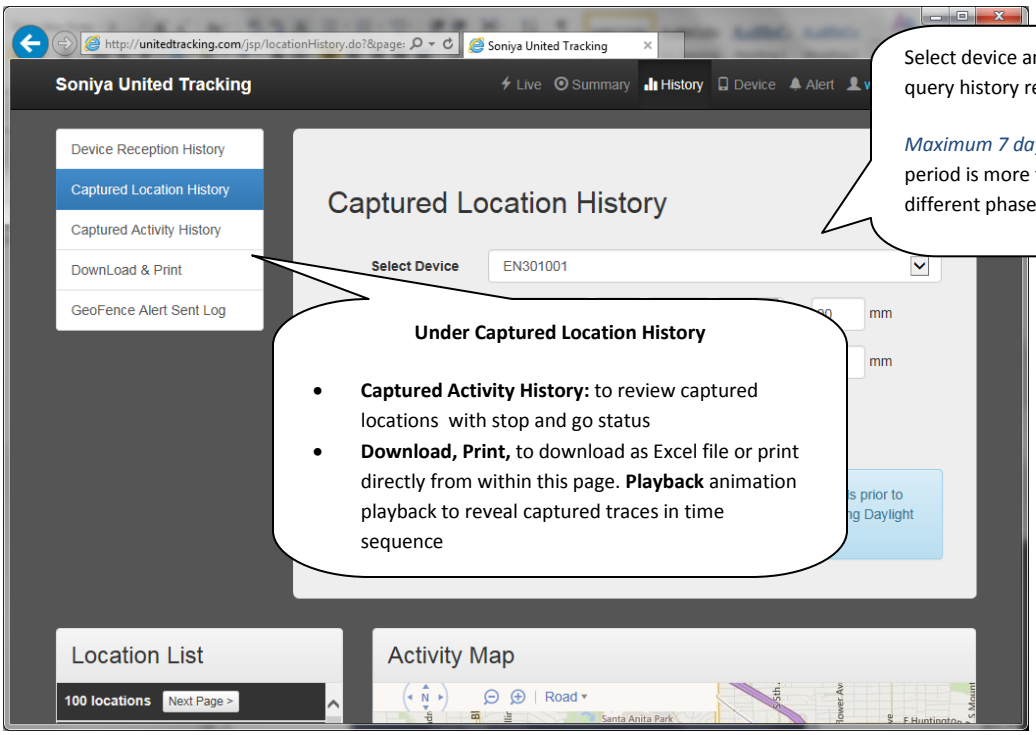


Select device and date/time period to query history records.

Maximum 7 days per query. If query period is more than 7 days, split into different phases less than 7 days.

Captured Location History

- **View History Map** to review captured locations on map with details of each reading
- **View Activity View** to review captured locations with stop and go status
- **Playback Console** animation playback to reveal captured traces in time sequence
- **Print or Download** to download as Excel file or print directly from within this page

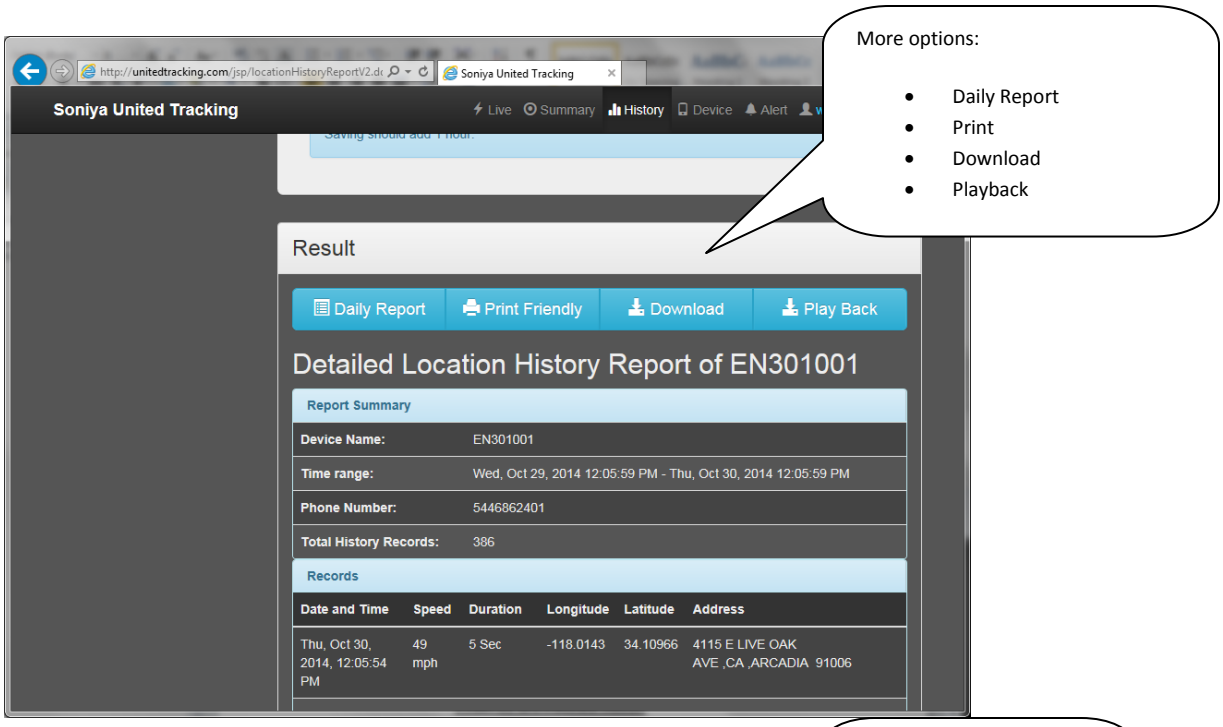


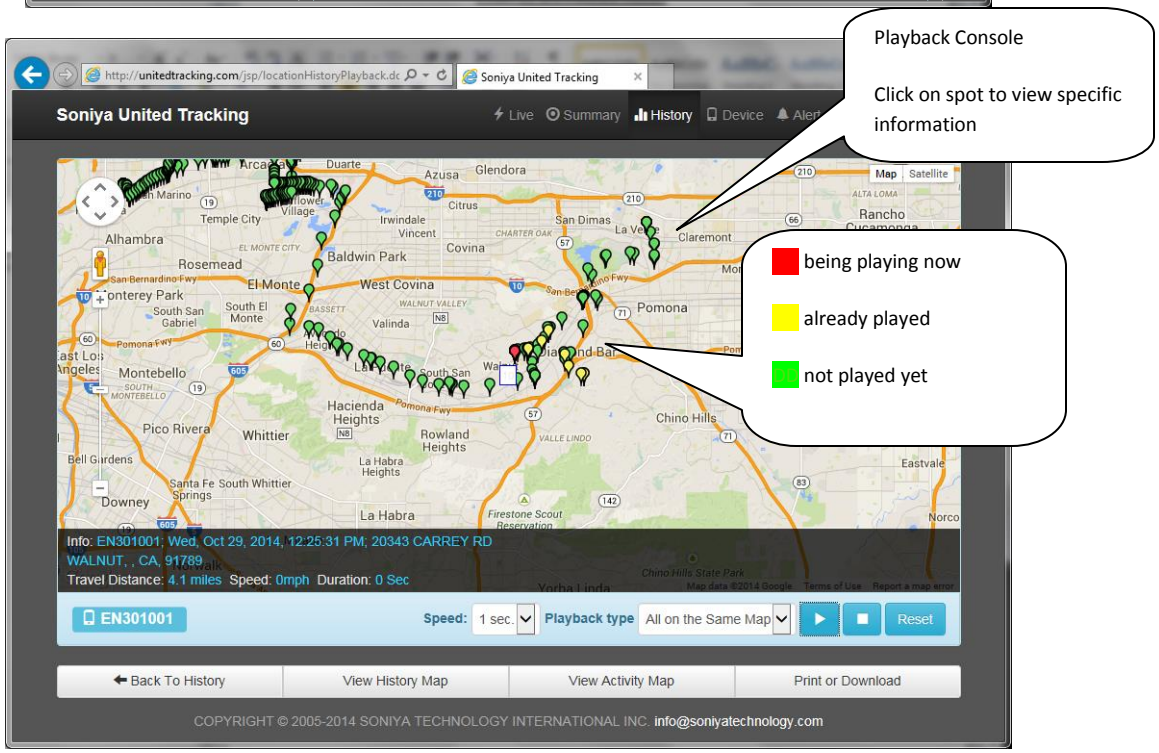
Select device and date/time period to query history records.

Maximum 7 days per query. If query period is more than 7 days, split into different phases less than 7 days.

Under Captured Location History

- **Captured Activity History:** to review captured locations with stop and go status
- **Download, Print,** to download as Excel file or print directly from within this page. **Playback** animation playback to reveal captured traces in time sequence


More options:
Daily Report
Print
Download
Playback
Soniya United Tracking
Live
Summary
History
Device
Alert
Result
Daily Report
Print Friendly
Download
Play Back
Detailed Location History Report of EN301001
Report Summary
Device Name: EN301001
Time range: Wed, Oct 29, 2014 12:05:59 PM - Thu, Oct 30, 2014 12:05:59 PM
Phone Number: 5446862401
Total History Records: 386
Records
Date and Time
Speed
Duration
Longitude
Latitude
Address
Thu, Oct 30, 2014, 12:05:54 PM
49 mph
5 Sec
-118.0143
34.10966
4115 E LIVE OAK AVE ,CA ,ARCADIA 91006


Playback Console
Click on spot to view specific information
being playing now
already played
not played yet
Soniya United Tracking
Live
Summary
History
Device
Alert
Info: EN301001; Wed, Oct 29, 2014, 12:25:31 PM; 20343 CARREY RD
WALNUT, , CA, 91789
Travel Distance: 4.1 miles Speed: 0mph Duration: 0 Sec
EN301001
Speed: 1 sec.
Playback type
All on the Same Map
Reset
Back To History
View History Map
View Activity Map
Print or Download
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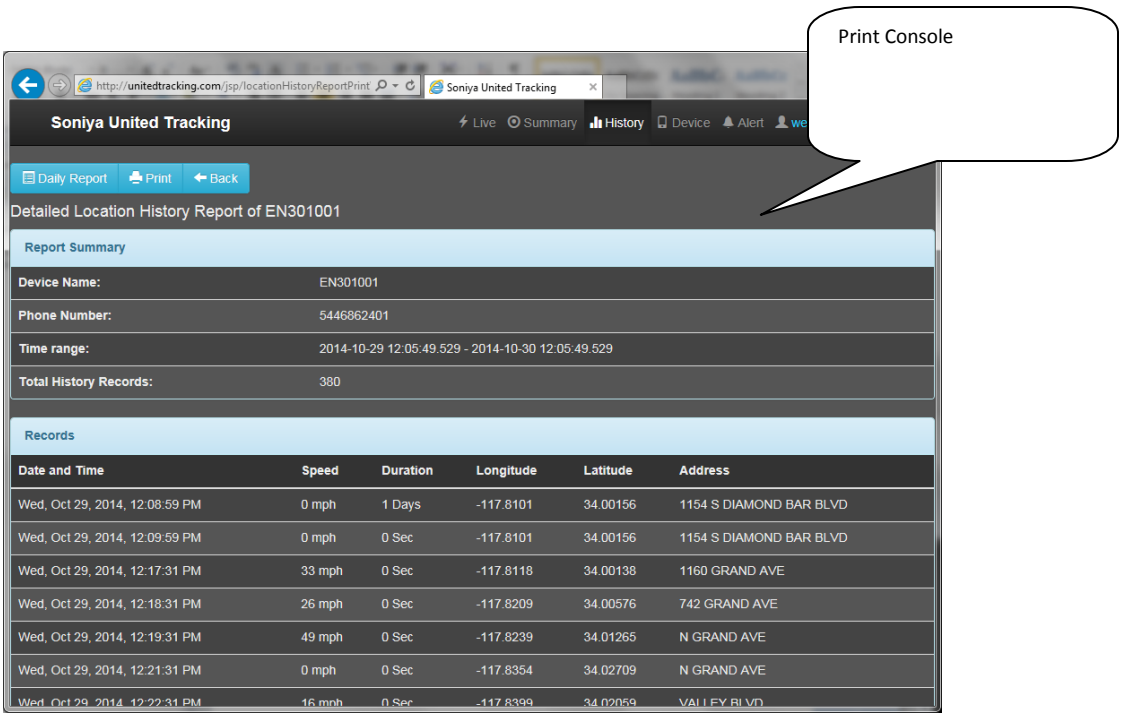
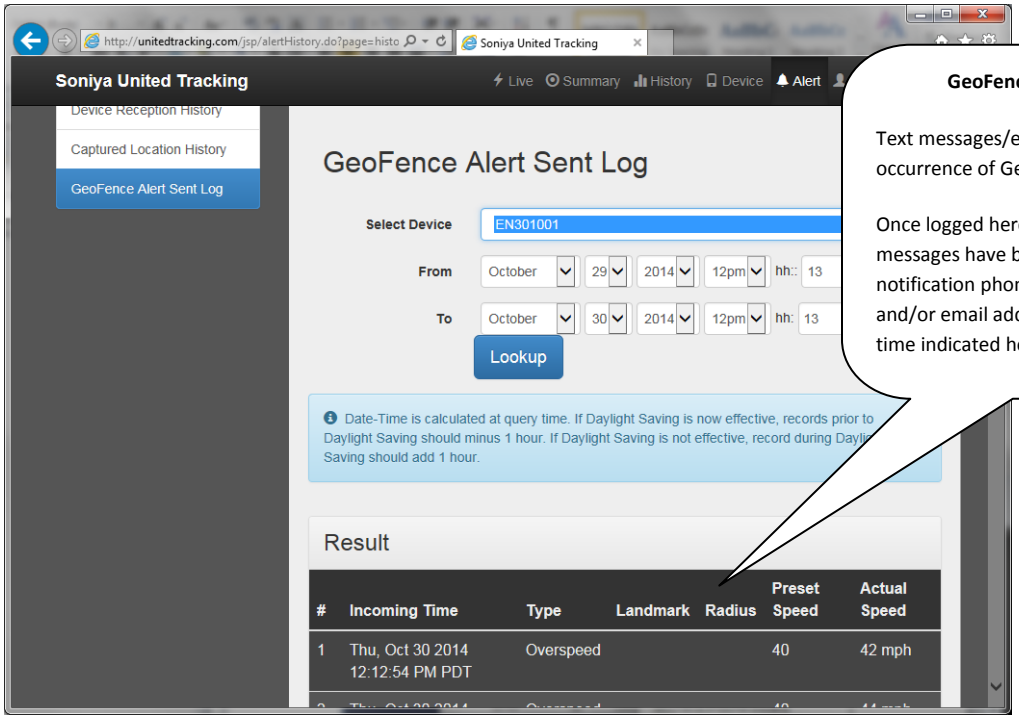

Print Console
Soniya United Tracking
Live
Summary
History
Device
Alert
Daily Report
Print
Back
Detailed Location History Report of EN301001
Report Summary
Device Name: EN301001
Phone Number: 5446862401
Time range: 2014-10-29 12:05:49.529 - 2014-10-30 12:05:49.529
Total History Records: 380
Records
Date and Time | Speed | Duration | Longitude | Latitude | Address
Wed, Oct 29, 2014, 12:08:59 PM | 0 mph | 1 Days | -117.8101 | 34.00156 | 1154 S DIAMOND BAR BLVD
Wed, Oct 29, 2014, 12:09:59 PM | 0 mph | 0 Sec | -117.8101 | 34.00156 | 1154 S DIAMOND BAR BLVD
Wed, Oct 29, 2014, 12:17:31 PM | 33 mph | 0 Sec | -117.8118 | 34.00138 | 1160 GRAND AVE
Wed, Oct 29, 2014, 12:18:31 PM | 26 mph | 0 Sec | -117.8209 | 34.00576 | 742 GRAND AVE
Wed, Oct 29, 2014, 12:19:31 PM | 49 mph | 0 Sec | -117.8239 | 34.01265 | N GRAND AVE
Wed, Oct 29, 2014, 12:21:31 PM | 0 mph | 0 Sec | -117.8354 | 34.02709 | N GRAND AVE

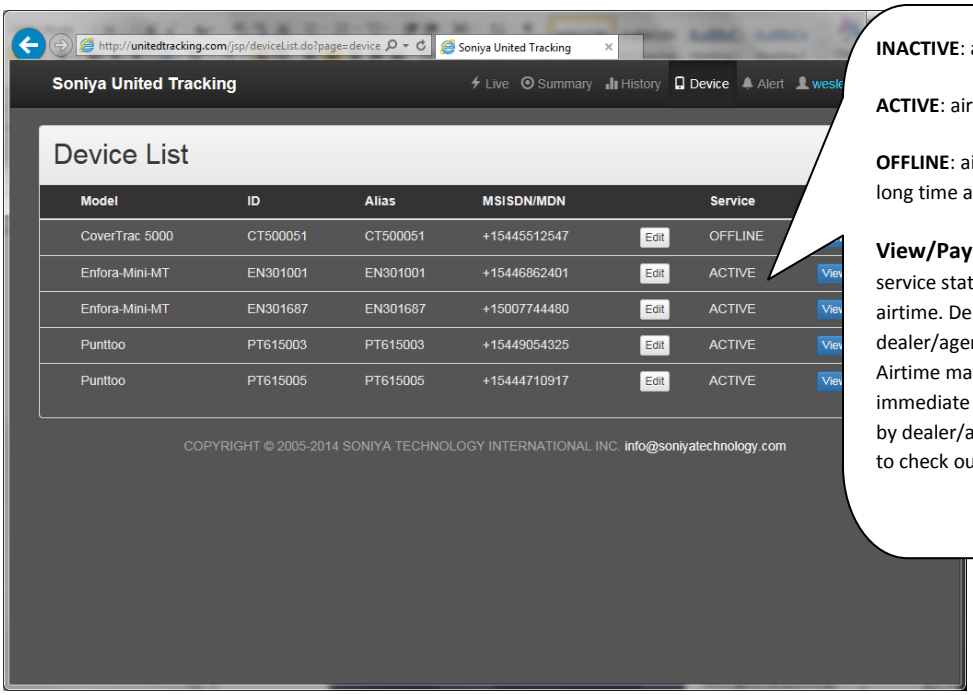
GEOFENCE TEXT SENT LOG



DEVICE PAGE

This page shows devices status of airtime service.

User can also change device settings from here.

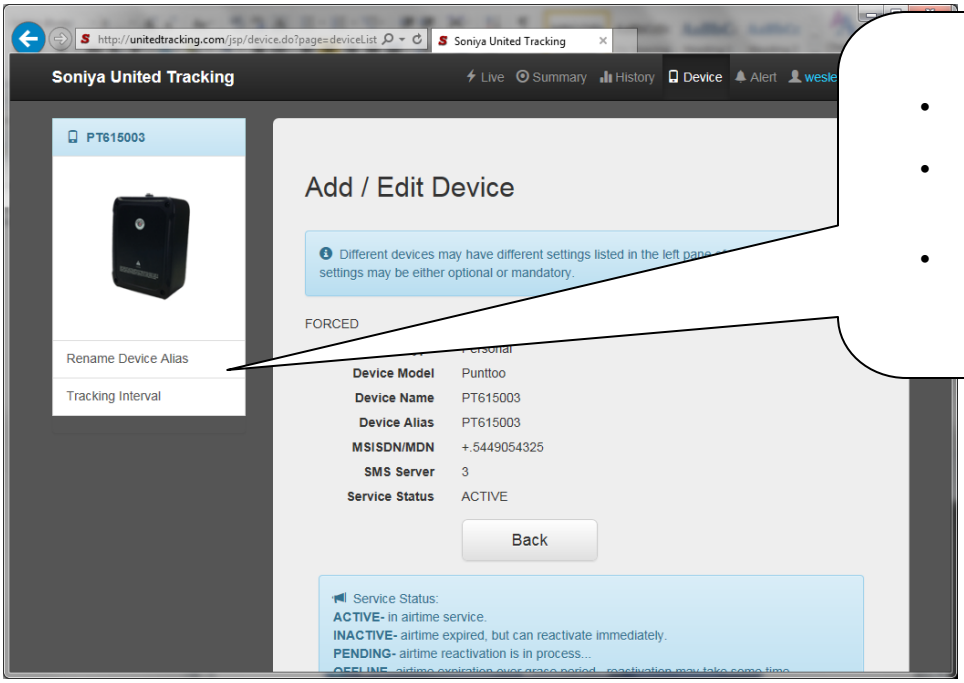


INACTIVE: airtime expired.

ACTIVE: airtime in service

OFFLINE: airtime service expired long time ago

View/Pay: click here to view service status or purchase new airtime. Depends on the dealer/agency user goes through. Airtime may be purchased online for immediate reactivation, or handled by dealer/agency. Click this button to check out.



Edit Device

- **Alias**. User can assign a temporary name.
- **Tracking Interval**. Here is another place user can change interval.
- **LED on/off**. Remotely turns front LED light on or off.

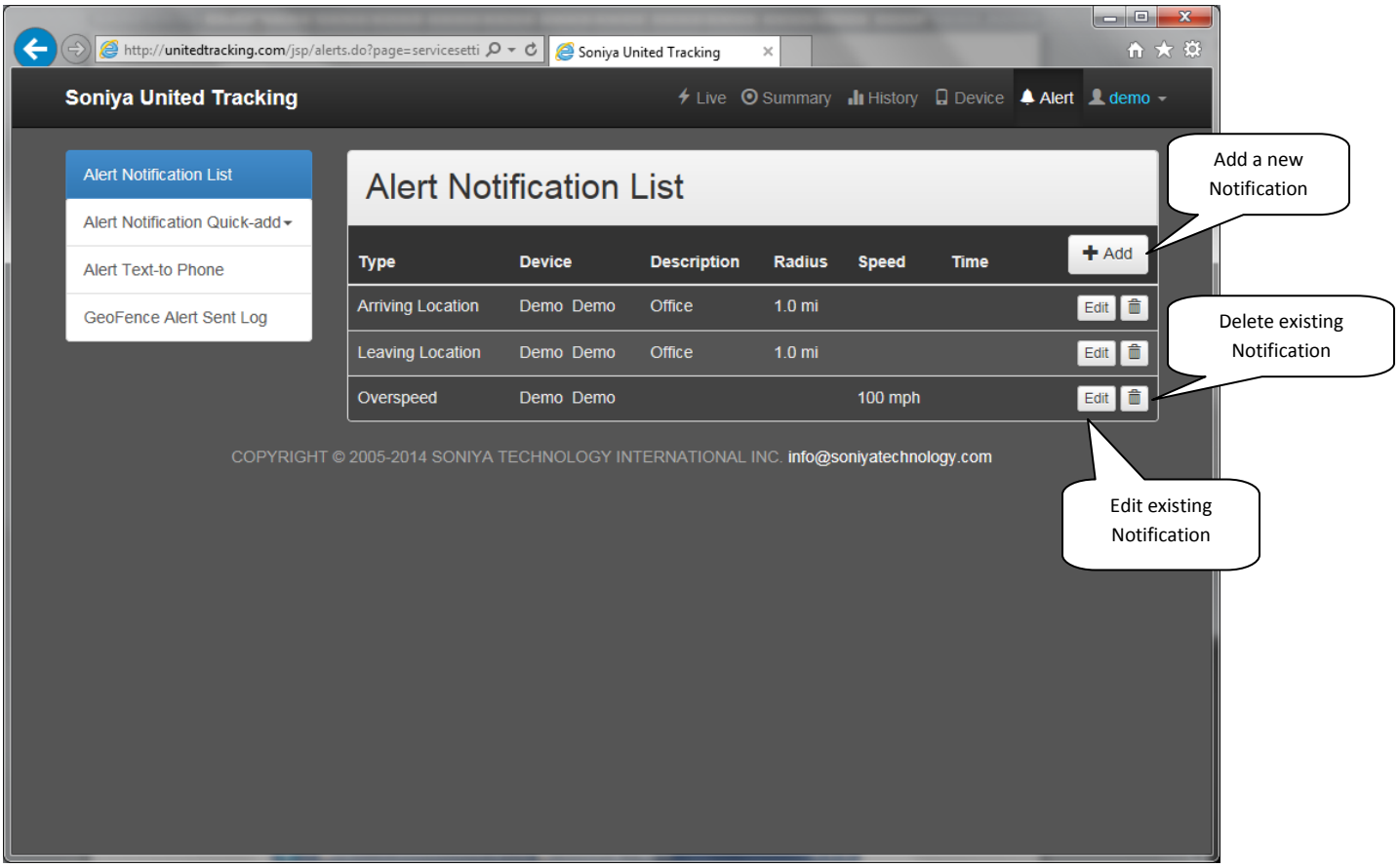
ALERT MENU

This is the page where Geo-Fence and other alert notifications are management. Notification is text messages to mobile phone (SMS), or email, or both at the same time. Types of notification are explained below:

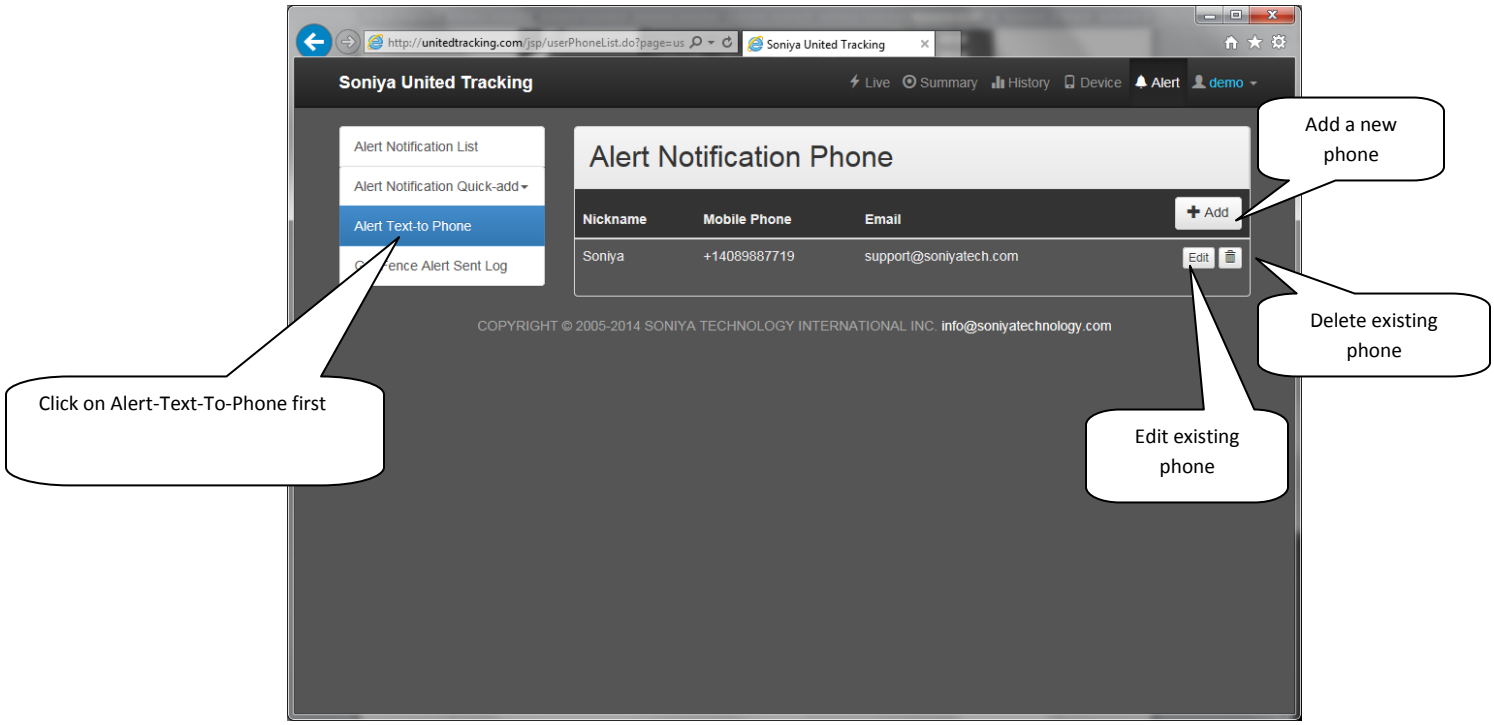
- Arriving Location – Approaching a range of user defined area or user provided postal address.
- Leaving Location – Away from a range of user defined area or user provided postal address.
- Speeding – Moving at a speed over the defined by user.
- Location Notification – Each and every detected location to be delivered to user mobile phone and/or email. (Message could be excessive)
- Low Battery. When battery bellows 10%. (Message could be excessive)

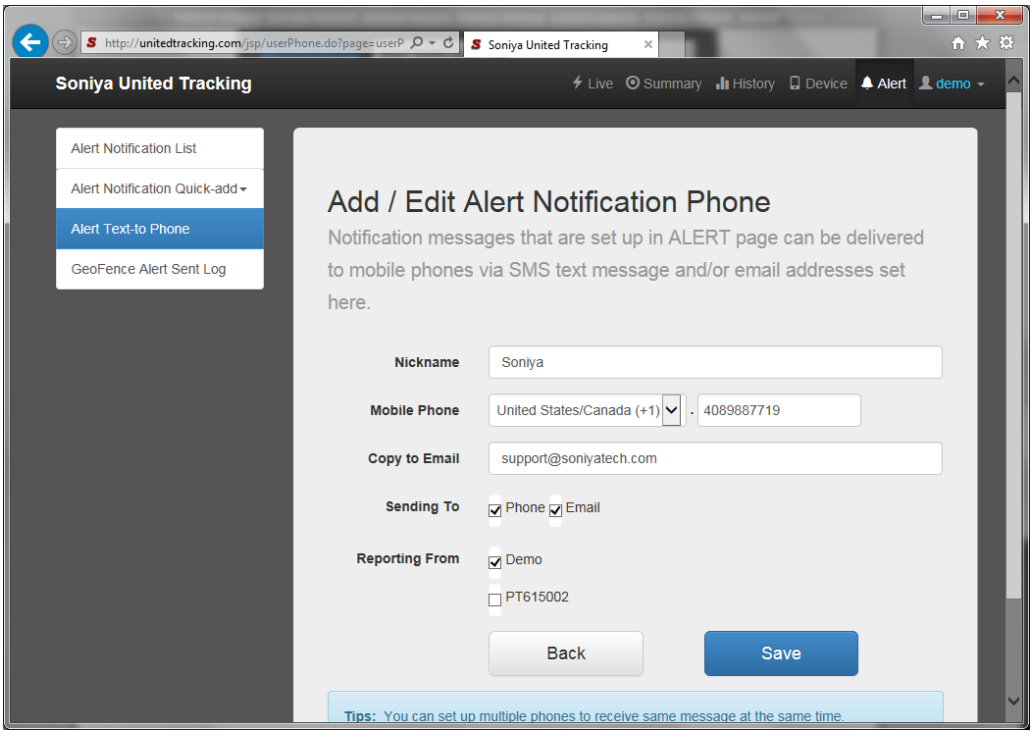
This is also the page where to set up notification receiver phone(s)

- We cover texting message to over 150 countries in the world.
- User can assign phones and devices to generation and receive alerts.



STEP 1: Set up Text-To-Phone first



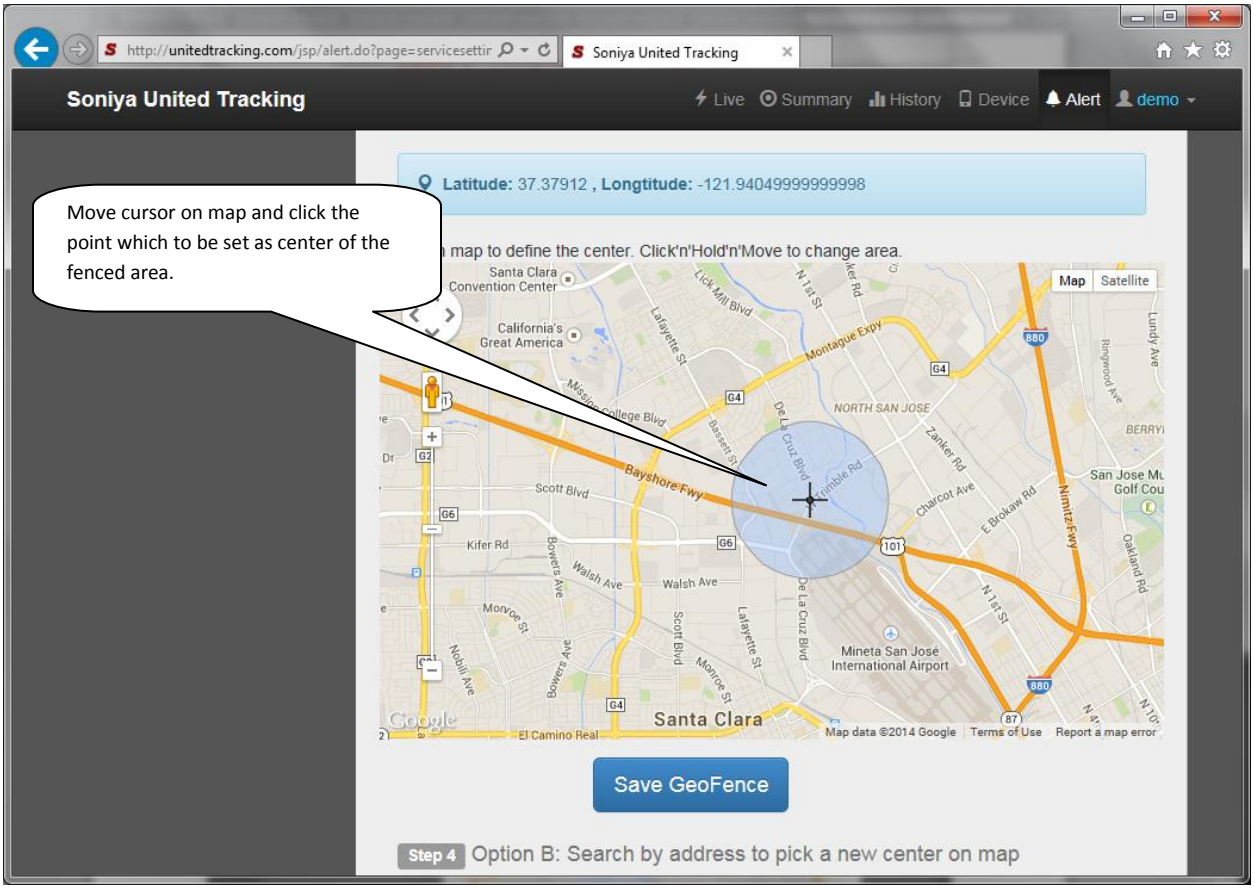


STEP 2: Add/Edit texting notifications

GeoFence is user defined area. When unit is detected entering or leaving this range, a notification alert will be generated and delivered to Notification Phone as text message.

- Arriving Location - Entering a defined area centered by a user defined address (so called GeoFence). This notification is a text message.
- Leaving Location - Leaving a defined area centered by a user defined address (so called GeoFence). This notification is a text message.
- Over-speed – Speed is over a limited defined by user. This notification is a text message.
- Location Notification – each of detected locations to be delivered to mobile phone and/or email a as text message.
- Low Battery – get notified if battery level is detected lower than 10%

Below is an example of Arriving/Leaving Location:

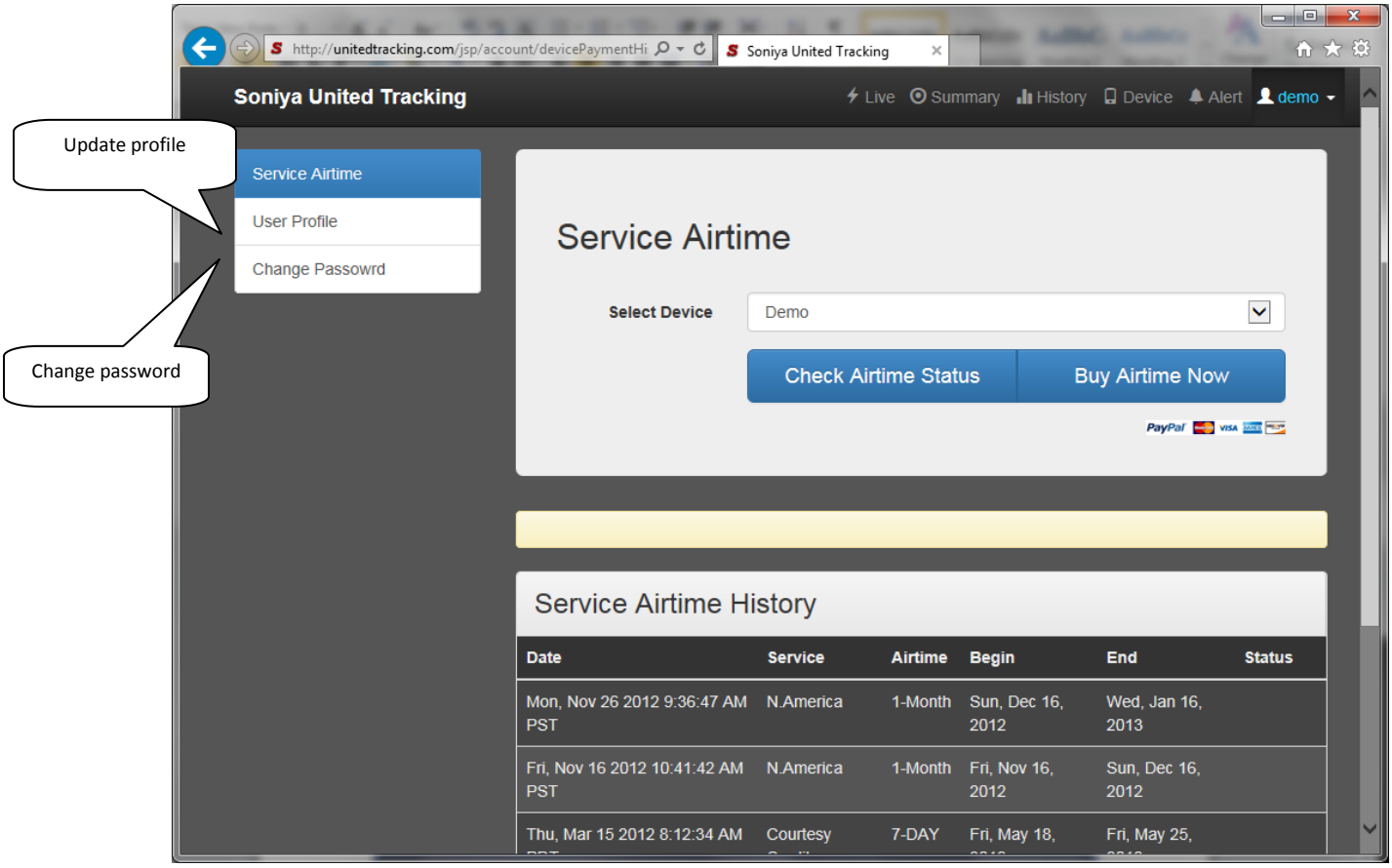


USER ACCOUNT PAGE

This page is for user to:

- Check Airtime Service Status, and purchase new airtime.

- Update profile, e.g. email to receive service notice and recover lost password. User can also adjust time zone. (All date time in history are in location time zone as set at the time.)



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